

An Anomaly of a *Helix aspersa* Shell which Failed to Appear in Successive Generations (Mollusca:Pulmonata)

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(Plate 27)

AN ANOMALOUS specimen of *Helix aspersa* MÜLLER was found in a garden in Woodland Hills, California in September, 1961. It seemed to be normal in all respects, except that the shell appeared as though it had been stretched lengthwise out of the usual form while maintaining the four logarithmic spiral coils characteristic of the species. The apical angle of the shell was acute as compared to the obtuse apical angle seen in the usual specimens. The spiral was dextrally oriented and the shell was marked in a manner characteristic of *Helix aspersa*. No other specimen with a shell of this type has been seen in over five years of observing the species in this geographic area. The anomalous specimen is shown in Figure 1, Plate 27.

The anomalous specimen was bred with an 'average' member of *Helix aspersa* and in May, 1962 it deposited eggs which hatched. Figure 2, Plate 27, shows a repre-

sentative specimen resulting from this mating after it had attained mature size in about four and one-half months. It appears to be the usual *Helix aspersa* with no changes in shell form. Other specimens resulting from this mating likewise showed the shell morphology characteristic of the species.

The specimens resulting from the first mating were then bred to each other. The young were hatched in January, 1963 and all appeared to be the usual *Helix aspersa*. Figure 3, Plate 27, shows a representative specimen resulting from the second mating.

The anomalous specimen died before it could be bred again.

Among 56 specimens resulting from the first mating there were none which resembled the anomalous member shown in Figure 1. Seventy-four specimens resulting from the second mating likewise failed to show the anomaly.



Explanation of Plate 27

Figure 1: The anomalous specimen of *Helix aspersa*.

Figure 2: A representative specimen resulting from the breeding of the anomalous specimen with a normal *Helix aspersa*. The depressed fracture of the shell resulted from an accident while handling.

Figure 3: A representative specimen resulting from the breeding of two specimens of the group shown in Figure 2.